CLAIMS :

1. (Original)

A floatable vessel includes a weighted keel having a depth below the waterline substantially greater than the height of the deck above the waterline and a self-righting mechanism comprising a lightweight float mount at one end of a flexible elongate element, the other end of the elongate element being attached to a biasing means secured to the deck of the vessel wherein, in the event of the vessel capsizing or partially capsizing, the force of the water on the keel and the force of the self-righting mechanism about the longitudinal axis of the vessel act together to right the vessel.

2. (Original)

A floatable vessel according to claim 1 in which the ratio of the depth of the keel to the height of the deck above the waterline is greater than or equal to 5:1.

3. (Original)

a floatable vessel according to claim 1 and claim 2 in which the motor and related components are located in the keel.

4. (Original)

A floatable vessel according to any of the above claims in which the weight of the keel comprises the major portion of the weight of the vessel.

5. (Original)

A floatable vessel according to any of the above claims in which the hull of the vessel includes a deep central keel formation located along the longitudinal axis of the vessel between twin hulls of substantially reduced depth relative to that of the keel.

6. (Original)

A floatable vessel according to any of the above claims in which the self-righting mechanism is anchored to a point along the longitudinal axis of the vessel.

7. (Original)

A floatable vessel according to any of the above claims in which the biasing means comprises a coiled stainless steel spring with the elongated element comprising a stainless steel cable and the bloat a polystyrene ball or air-inflated ball.

AMENDED CLAIMS

[Received by the International Bureau on 31 August 2005 (31.08.2005); original claim 31 has been cancelled ; other claims are unchanged]

25.

A floatable vessel according to claim 24 in which the bow extension comprises a similar shape to that of the bow of the vessel and serves to lengthen the bow.

26.

A floatable vessel according to any of the above claims in which for a 110 mm 3-blade rough pitch propeller, the motor comprises two 7.8 to 9 amp/hr dry cell batteries wired in parallel, connected through an on-off switch to a 300 amp Mosfet speed controller operating in a mark space ration basis and being connected to a brush motor wound to provide 12 000 rpm at 12 volts, drive torque being achieved with the use of a 3:1 reduction box which provides a propeller speed underload of approximately 2500 – 3000 rpm.

27.

A floatable vessel according to any of the above claims in which the vessel is provided with one or more inflatable tubes located about the perimeter of the deck to improve buoyancy.

28.

A floatable vessel according to claim 27 in which the tubes are self-inflating.

29.

A floatable vessel according to claims 27 and 28 in which one or more handles are provided along the length of the deck and/or at the stern to enable persons to grab hold of the vessel and be towed by it.

30.

A floatable vessel according to any of the above claims in which the vessel includes a propeller guard and/or rudder guard.

8. (Original)

A floatable vessel according to claim 7 in which the length of the stainless steel cable or alternatively the height of the float above the deck is variable, permitting adjustment according to water conditions.

9. (Original)

A floatable vessel according to claim 7 in which a pilot light is attached to the self-righting mechanism or vessel itself for night time use.

10. (Original)

A floatable vessel according to claim 7 in which the float is bi-coloured, being divided into different-coloured halves parallel to the longitudinal axis of the boat.

11. (Original)

A floatable vessel according to any of the above claims in which the vessel is remote controlled, including a motor controllable by means of a signal transmitted from a remote location and receivable by an antenna located abroad the vessel and in communication with the motor and steering mechanism.

12. (Original)

A floatable vessel according to claim 11 in which the vessel is radio controlled.

13. (Original)

A floatable vessel according to any of the above claims in which the vessel is a bait boat and includes a bait tray located towards the rear (stern) of the vessel and further includes a remotely activated flap which is pivotable to an open position upon receipt of the appropriate signal from the control to release bait into the water.

14. (Original)

A floatable vessel according to claim 13 which includes a retrieval line releasable securable to the bow thereof, the bow including a bow-ring for this purpose, the retrieval line being payed out form a winch located on shore.

15. (Original)

A floatable vessel according to claim 14 in which the winch is portable and is mountable upon a trolley adapted for this purpose.

16. (Original)

A floatable vessel according to claim 14 in which the winch is battery operated and housed in a waterproof enclosure.

17. (Original)

A floatable vessel according to claim 14 in which the winch is equipped with a slip-clutch to break the torque of its 25:1 pulley drive ration and includes a constant tension brake release mechanism to prevent the line from tangling.

18. (Original)

A floatable vessel according to any of the above claims in which the vessel includes a trim tab to enable the vessel to submerge.

19. (Original)

A floatable vessel according to claim 18 in which the trim tab comprises The stern section of the vessel which has been lengthened to act as a trim tab.

20. (Original)

A floatable vessel according to claim 18 in which the stern section Comprises approximately 1/3 the length of the boat.

21. (Original)

A floatable vessel according to any of the claims 18 to 10 in which the Underside of the trim tab is concavely arcuate to accentuate its ability to dive.

22. (Original)

A floatable vessel according to any of the above claims 18 to 20 in In which the ability of the boat to drive is a function of the length of the boat, weight of the boat and the length of the stern.

23. (Original)

A floatable vessel according to claim 22 in which a boat of one meter in Length, weighing approximately 15 kilograms, the optimum stern length Is approximately three hundred and thirty three millimeters.

24. (Original)

A floatable vessel according to any of the above claims 18 to 23 in which the bow extension element is releasably securable to the bow of the vessel to limit or extend dive capability.

25. (Original)

A floatable vessel according to claim 24 in which the bow extension comprises a similar shape to that of the bow of the vessel and serves to lengthen the bow.

26. (Original)

A floatable vessel according to any of the above claims in which for a 110 mm 3-blade rough pitch propeller, the motor comprises two 7.8 to 9 amp/hr dry cell batteries wired in parallel, connected through an on-off switch to a 300 amp Mosfet speed controller operating in a mark space ration basis and being connected to a brush motor wound to provide 12 000 rpm at 12 volts, drive torque being achieved with the use of a 3:1 reduction box which provides a propeller speed underload of approximately 2500 – 3000 rpm.

27. (Original)

A floatable vessel according to any of the above claims in which the vessel is provided with one or more inflatable tubes located about the perimeter of the deck to improve buoyancy.

28. (Original)

A floatable vessel according to claim 27 in which the tubes are self-inflating.

29. (Original)

A floatable vessel according to claims 27 and 28 in which one or more handles are provided along the length of the deck and/or at the stern to enable persons to grab hold of the vessel and be towed by it.

30. (Original)

A floatable vessel according to any of the above claims in which the Vessel includes a propeller guard and/or rudder guard.

31. (Cancelled)

A floatable vessel substantially as described with reference to the accompanying drawings.

Signed this 26th day of June 2007.

Applicant (Inventor)

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